United States Department of Agriculture
National Agricultural Statistics Service

Wisconsin Ag News – Chemical Use
Soybeans: Fall 2015

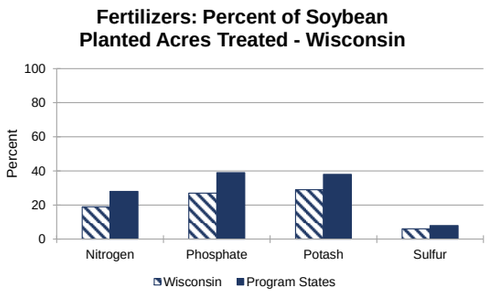
Upper Midwest Region - Wisconsin Field Office · 2811 Agriculture Drive · Madison WI 53718 · (608) 224-4848
fax (855) 271-9802 · www.nass.usda.gov
Cooperating with Wisconsin Department of Agriculture, Trade and Consumer Protection

May 24, 2016 *Media Contact: Greg Bussler*

The 2015 Agricultural Chemical Use Survey of soybean producers collected data about fertilizer and pesticide use as well as pest management practices in growing soybeans.

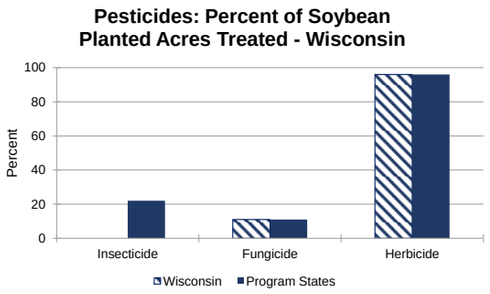
Fertilizer Use

Fertilizer refers to a soil-enriching input that contains one or more plant nutrients, primarily nitrogen (N), phosphate (P_2O_5), and potash (K_2O). Of the three primary macronutrients, potash was the most widely used on soybeans planted in Wisconsin according to the latest USDA, National Agricultural Statistics Service – *Agricultural Chemical Use* report. Farmers applied potash to 71 percent of planted acres at an average rate of 87 pounds per acre. Macronutrients nitrogen and phosphate were applied to nearly half of the soybean acreage, at an average rate of 18 and 42 pounds per acre per year, respectively. The secondary macronutrient, sulfur, was applied to 29 percent of acres planted to soybeans.



Pesticide Use

The pesticide active ingredients used on soybeans are classified in this report as herbicides (targeting weeds), insecticides (targeting insects), fungicides (targeting fungal disease) and other chemicals (targeting all other pests and other materials, including extraneous crop foliage). Herbicides were applied to 96 percent of the soybean acres planted. Among herbicides, glyphosate isopropylamine salt and glyphosate potassium salt were the most widely applied active ingredients. Fungicides were applied to 11 percent of soybean acres planted in Wisconsin.



	Wisconsin			Program States [1]		
	Planted acres treated (%)	Rate applied per year (pounds per acre)	Total pounds applied (1,000 pounds)	Planted acres treated (%)	Rate applied per year (pounds per acre)	Total pounds applied (1,000 pounds)
Fertilizer Use on Soybeans						
Nitrogen	39	18	13,100	28	17	382,300
Phosphate	44	42	34,400	39	51	1,563,100
Potash	71	87	116,700	38	83	2,503,500
Sulfur	29	13	6,900	8	12	77,600
Pesticide Use on Soybeans by Active Ingredient						
FUNGICIDE:						
Fluxapyroxad	3	0.053	3	3	0.047	126
Propiconazole	6	0.091	10	3	0.113	311
Pyraclostrobin	3	0.108	7	4	0.109	373
TOTAL FUNGICIDE	11		30	11		1,413
HERBICIDE:						
2,4-D, 2-EHE	5	0.502	45	10	0.538	4,280
Chlorimuron-Ethyl	10	0.016	3	12	0.023	214
Clethodim	9	0.075	13	9	0.098	718
Cloransulam-Methyl	2	0.056	2	7	0.021	116
Flumioxazin	4	0.103	8	10	0.079	613
Fluthiacet-Methyl	3	0.006	(Z)	4	0.005	16
Fomesafen Sodium	3	0.230	13	16	0.244	3,034
Glyphosate	5	1.351	118	8	1.037	6,448
Glyphosate Dim. Salt	3	1.375	79	4	1.384	4,478
Glyphosate Iso. Salt	51	0.978	943	30	1.106	25,920
Glyphosate Pot. Salt	46	1.602	1,386	55	1.619	70,089
Imazethapyr	22	0.054	22	11	0.052	434
Metribuzin	6	0.145	17	9	0.260	1,836
Saflufenacil	6	0.022	2	8	0.031	198
Sulfentrazone	3	0.133	6	17	0.175	2,368
Thifensulfuron	4	0.004	(Z)	4	0.013	38
TOTAL HERBICIDE	96		2,829	96		150,246
INSECTICIDE:						
Lambda-Cyhalothrin	2	0.023	1	9	0.031	210
TOTAL INSECTICIDE	(D)		(D)	22		2,978

(D) Withheld to avoid disclosing data for individual operations.
(Z) Less than half the rounding unit.
[1] The 19 program states surveyed about soybeans in the 2015 ARMS were Arkansas, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Michigan, Minnesota, Mississippi, Missouri, Nebraska, North Carolina, North Dakota, Ohio, South Dakota, Tennessee, Virginia and Wisconsin.

Pest Management Practices: Scouting for weeds was the top pest management practice on **soybeans** acreage.

Pest Management Practices	Wisconsin		Program States [1]	
	% of area planted	% of operations	% of area planted	% of operations
Avoidance				
Crop or plant variety chosen for specific pest resistance	53	54	49	47
Planting locations planned to avoid cross infestation of pests	19	24	17	16
Planting or harvesting dates adjusted	19	15	20	21
Rotated crops during past 3 years	90	90	90	87
Row spacing, plant density, or row directions adjusted	35	21	22	22
Monitoring				
Diagnostic laboratory services used for pest detection via soil or plant tissue analysis	6	7	7	6
Field mapping data used to assist decisions	13	11	14	12
Scouted -				
-established process used	22	16	23	19
-for pests due to a pest advisory warning	11	10	12	10
-for pests due to a pest development model	6	6	10	8
-for pests or beneficial organisms-not scouted	9	13	5	7
-for pests or beneficial organism by conducting gen. observations while performing routine tasks	23	21	26	29
-for pests or beneficial organism by deliberately going to the crop acres or growing areas	68	66	69	64
Scouted for diseases	84	70	81	77
-by employee	1	1	2	2
-by farm supply company or chemical dealer	18	30	13	14
-by independent crop consultant or commercial scout	15	13	14	11
-by operator, partner, or family member	65	56	71	73
Scouted for insects & mites	87	77	85	80
-by employee	1	1	1	1
-by farm supply company or chemical dealer	19	30	13	14
-by independent crop consultant or commercial scout	15	12	14	11
-by operator, partner, or family member	65	57	71	73
Scouted for weeds	91	87	94	92
-by employee	1	1	1	1
-by farm supply company or chemical dealer	18	27	12	13
-by independent crop consultant or commercial scout	16	12	13	10
-by operator, partner, employee, or family member	65	61	74	77
Weather data used to assist decisions	58	58	59	56
Written or electronic records kept to track pest activity	26	19	31	26
Prevention				
Beneficial insect or vertebrate habitat maintained	12	10	10	9
Crop residues removed or burned down	7	8	11	14
Equipment & implements cleaned after field work to reduce spread of pests	32	29	40	39
Field edges, ditches, or fence lines were chopped, sprayed, mowed, plowed, or burned	41	38	56	52
Field left fallow previous year to manage insects	3	1	1	1
Flamer used to kill weeds	(Z)	1	1	(Z)
No-till or minimum till used	81	78	74	75
Plowed down crop residue using conventional tillage	24	31	25	25
Seed treated for insect or disease control after purchase	39	38	41	34
Water management practices used	4	3	4	3
Suppression				
Beneficial organisms applied or released	0	0	1	1
Biological pesticides applied	4	4	4	4
Buffer strips or border rows maintained to isolate organic from non-organic crops	2	2	5	6
Floral lures, attractants, repellants, pheromone traps, or biological pest controls used	0	0	(Z)	(Z)
Ground covers, mulches, or other physical barriers maintained	48	49	44	43
Pesticides with different mechanisms of actions to keep pest from becoming resistant to pesticides	29	26	33	29
Scouting data compared to published information to assist decisions	30	25	26	23
Trap crop grown to manage insects	1	1	(Z)	(Z)

(Z) Less than half the rounding unit.

[1] The 19 program states surveyed about soybeans in the 2015 ARMS were Arkansas, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Michigan, Minnesota, Mississippi, Missouri, Nebraska, North Carolina, North Dakota, Ohio, South Dakota, Tennessee, Virginia and Wisconsin.